

Work Order ID 63319

Wednesday, October 27, 2010 3:00:57 PM



Page 1

Item ID: D2230-1

Accept



Setup Start



Revision ID:

Stop



Item Name: Lug

Start Date: 10/27/2010 Start Qty: 60.00



Cust Item ID:

Required Date: 11/11/2010 Req'd Qty: 60.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

[Signature]

Date: 10-10-27

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D2230	Rev G

100		0.00							
-----	--	------	--	--	--	--	--	--	--



BAND SAW

Bandsaw

Memo

0.00

Jeaspa Bandsaw

Cut D2423 extrusion to 0.82"

Batch:

cut @ Metec

110		0.00							
-----	--	------	--	--	--	--	--	--	--



HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.00

HAAS CNC vertical machine #1

1-Machine per folio FA927

DWG REV:

FOLIO REV:

(Check for crack while loading into the machine.)

2- deburr rough edges

Issue P.O to Metec P/O: 13000
Machine per drug D2230 Rev G

CX 1011124 (60)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 63319

Wednesday, October 27, 2010 3:00:57 PM

Page 2

Item ID: D2230-1

Accept

Setup Start

Revision ID:

Stop

Item Name: Lug

Start Date: 10/27/2010 Start Qty: 60.00

Cust Item ID:

Required Date: 11/11/2010 Req'd Qty: 60.00

Customer:

Reference:

Run Start

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

120

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

0.00

Quality Control

Review

Review + Inspect for transit damage

6/14/12/3 (60)

130

QC2- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

8/10/12/00

count

(76)

140

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

60 BL 10-12-7

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 63319

Wednesday, October 27, 2010 3:00:57 PM

Page 3

Item ID: D2230-1

Accept

Revision ID:

Item Name: Lug

Start Date: 10/27/2010 Start Qty: 60.00

Required Date: 11/11/2010 Req'd Qty: 60.00

Reference:

Cust Item ID:

Customer:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run

Start

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

150

QC3- Inspect Part Finish

0.00

QC

Memo

0.00

Quality Control

160

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

Powdercoat

Memo

0.00

Powder Coating

START TIME: 9:30

OVEN TEMPERATURE: 320°

FINISH TIME: 10:00

170

QC3- Inspect Part Finish

0.00

QC

Memo

0.00

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 63319

Wednesday, October 27, 2010 3:00:57 PM

Page 4

Item ID: D2230-1

Accept

Revision ID:

Item Name: Lug

Start Date: 10/27/2010 Start Qty: 60.00

Required Date: 11/11/2010 Req'd Qty: 60.00

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

180



Packaging

Packaging

Identify as per dwg & Stock Location: *St 476*

0.00

Memo

0.00

190



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

*ES 10/12/09 (60)**10/12/09 HJ*
mf
mf
10-12-09

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Wednesday, October 27, 2010 3:01:01 PM

Page 1

Work Order ID: 63319

Parent Item: D2230-1

Parent Item Name: Lug



Start Date: 10/27/2010

Required Date: 11/11/2010

Start Qty: 60.00

Required Qty: 60.00

Comments: IPP ☐ D ☐ 00.11.01 ☐ Added inspection level 8, and removed P/O for powder coat ☐ EC ☐

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D2423		Manufactured	No			110	f	316.4039	0.0683	4.313684			
-------	--	--------------	----	--	--	-----	---	----------	--------	----------	--	--	--



Lug Extrusion



CL 10/11/25

Location

Loc Qty

Loc Code

MAT06

316.4039265

43722

180

45800

136.403926

4.313

D 2230-1 P

X 60

CL 10/12/3 (60)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

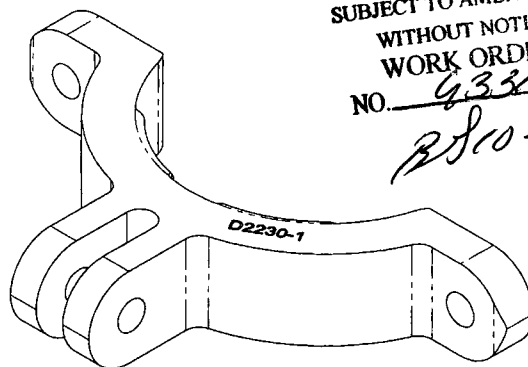
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

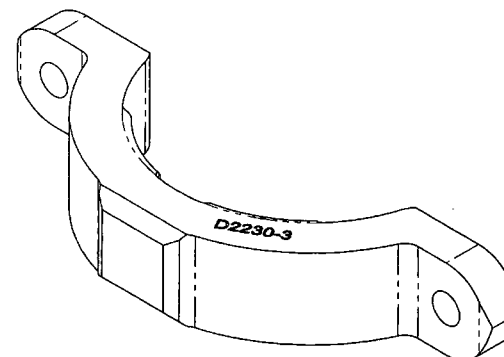
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 9339
2810-10-27



D2230-1 MOUNTING LUG



D2230-3 MOUNTING LUG

RELEASED
01/06/15

G	REDRAWN IN SOLIDWORKS TO CURRENT DESIGN. STANDARDS REFER TO SECTION A-A & B-B FILLET ADDED TO PREVENT CHAFING OF RUBBER CUSHION ON INSTALLATION.	AJS	09.01.16
F	REDESIGN: R1.200 WAS 1.100	CP	99.12.13
E	RE-DESIGN	BW	95.01.04
D	RE-DESIGN	BW	95.01.04
C	RE-DESIGN	BW	94.03.30
REV.	DESCRIPTION	BY	DATE
DESIGN	BW	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. G
MFG. APPR.	<i>[Signature]</i>	D2230	SHEET 1 OF 3
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	MOUNTING LUG	NTS
DATE	09.01.16	<small>COPYRIGHT © 1994 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD</small>	



NOTES:

- 1) MATERIAL: MAKE FROM D2423 EXTRUSION
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: ENGRAVE PART NUMBER TO A DEPTH OF 0.010 ± 0.005 IN THIS LOCATION, WITH TOOL TIP RADIUS OF 0.015 ± 0.005.
- 7) WEIGHT: -1: 0.16 lbs
-3: 0.14 lbs

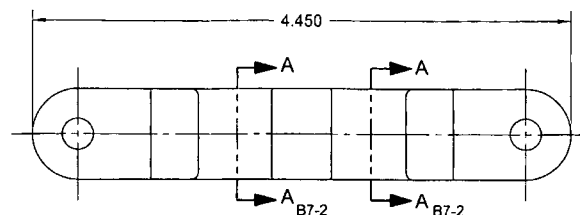
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

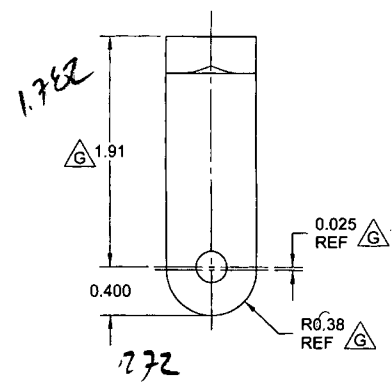
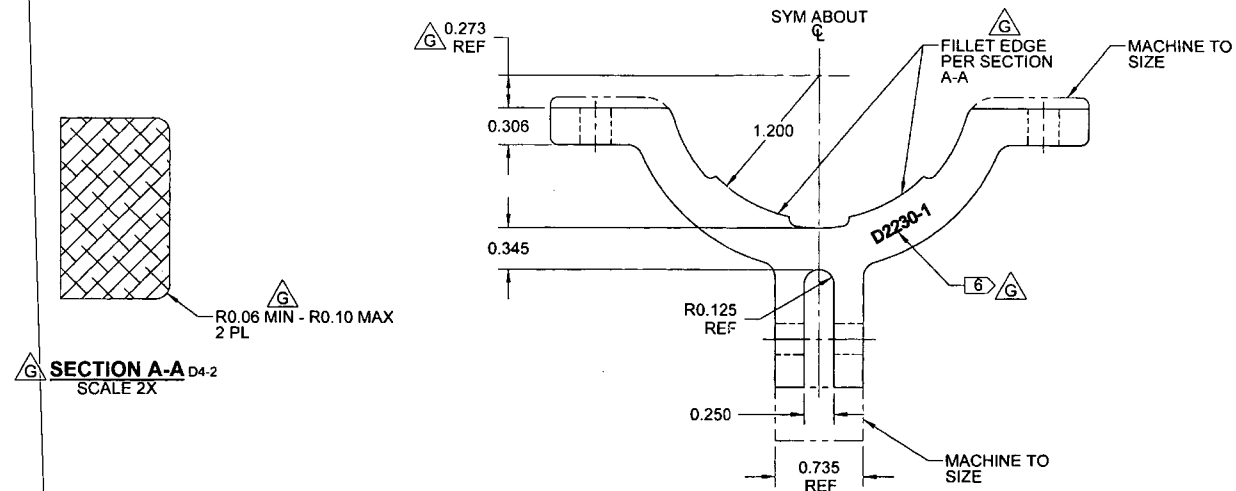
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

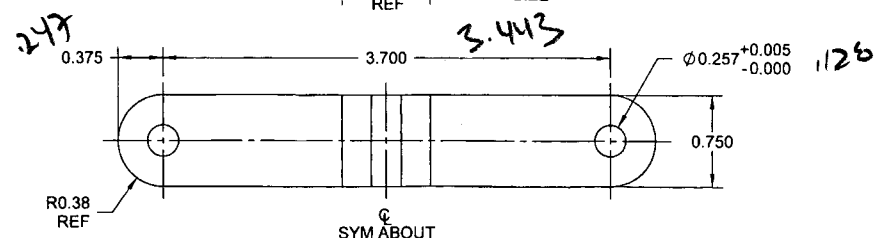
NOTE: Date & initial all entries



u/o 43319



SECTION A-A D4-2
SCALE 2X



D2230-1 MOUNTING LUG

RELEASED
09/06/25 HT

DESIGN	BW	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO. D2230	REV. G
MFG. APPR.		TITLE MOUNTING LUG	SHEET 2 OF 3
APPROVED		SCALE	NTS
DE APPR.		COPYRIGHT © 1994 BY DART AEROSPACE LTD	
DATE	09.01.16	THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

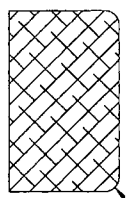
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

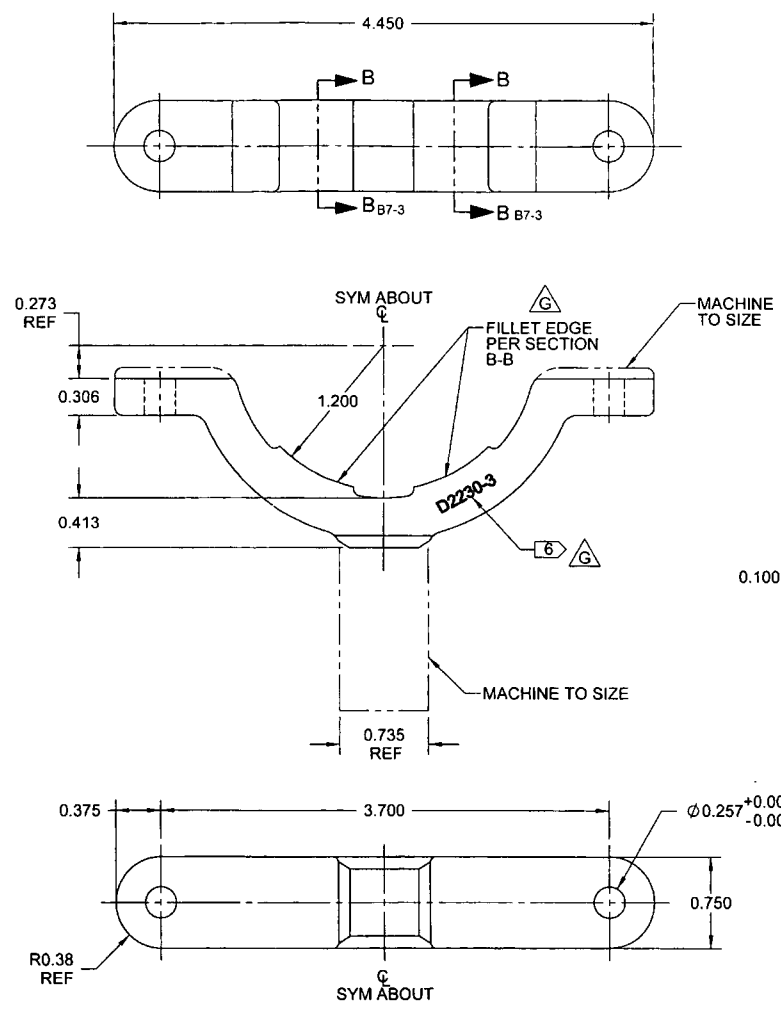
NOTE: Date & initial all entries

Wb 43319



SECTION B-B D4-3
SCALE 2X

R0.06 MIN - R0.10 MAX
2 PL



D2230-3 MOUNTING LUG

RELEASED
09/06/25

DESIGN	BW	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AS		
CHECKED		DRAWING NO.	REV. G
MFG. APPR.		D2230	SHEET 3 OF 3
APPROVED		TITLE	SCALE
DE APPR.		MOUNTING LUG	NTS
DATE	09.01.16	COPYRIGHT © 1994 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT THE WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO13000

Purchase Order Date 11/24/10

PO Print Date 11/24/10

Page Number 1 of 2

Order From:

VC-MET003

METEC METAL TECHNOLOGY INC.
20 TERRY FOX DRIVE PO BOX 781
VANKLEEK HILL, QC K0B 1R0
CA

Contact Name
Vendor Phone 613 678 3957
Vendor Fax 613 678 3956
Vendor Account Nbr

Buyer Chantal Lavoie
Requisition Nbr
Tax Resale Nbr 10127-2607
Terms Net 30
Currency CAD
FOB Destination-Collect

Ship To: DART AEROSPACE LTD 1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

PAID
11/24/10

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	D3910-3P	Crosstube Lug	11/29/10 Yes	30.00 Each		\$31.5500	\$946.50
		Special Inst:	MACHINE AS PER DWG D3910 REV. B B63333 REQUIRED ASAP PLEASE RUSH ORDER				
2	D3910-1P	CROSSTUBE LUG	12/01/10 Yes	20.00 Each	✓	\$31.5500	\$631.00
		Special Inst:	MACHINE AS PER DWG D3910 REV. B B64016				
3	D2230-1P	LUG	12/06/10 Yes	60.00 Each	✓	\$18.9500	\$1,137.00
		Special Inst:	MACHINE AS PER DWG D2230 REV. G B63319				
4	D2230-3P	LUG	12/08/10 Yes	60.00 Each		\$10.4000	\$624.00

No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required when applicable

Change Nbr: 1

Change Date: 11/24/10



20 Terry Fox Drive
Vankleek Hill, Ontario K0B 1R0
Tel: (613) 678-3957
Fax: (613) 678-3956

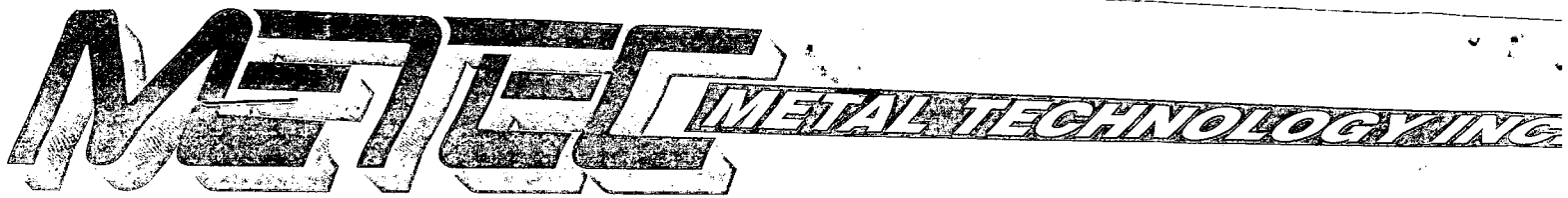
Delivery Slip No.: 17601

Date: Dec 2, 2010

Page: 1

Sold to: Dart Aerospace Ltd. Att. Linda Lacelle 1270 Aberdeen Street Hawkesbury, Ontario K6A 1K7	Ship to: Dart Aerospace Ltd. Att. Linda Lacelle 1270 Aberdeen Street Hawkesbury, Ontario K6A 1K7
Order No.: 13000	Sold By:
Shipped By: your truck	Ship Date:

Description	Unit	Ordered quantity	Shipped quantity	Backorder quantity
D3910-3 Crosstube Lug	Each	30		
D3910-1 Crosstube Lug	Each	20		
D2230-1 Mounting Lug	Each	60	60	
D2230-3 Mounting Lug	Each	60		60
D2230-3 Mounting Lug	Each	80		80
Received by _____		Thank you for your order!		



CERTIFICATE OF CONFORMITY

SOLD TO:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, Ont.
K6A 1K7

SHIPPED TO:

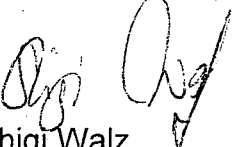
same

<u>QUANTITY</u>	<u>PART NUMBER</u>	<u>PART NAME</u>	<u>P.O. NUMBER</u>
60	D2230-1	Mounting Lug	13000
90	D2230-1	Mounting Lug	13003

MATERIAL: supplied by DART D2423 B45800

We hereby certify that the above parts were made in conformance with applicable drawings.

METEC Metal Technology Inc.


Shigi Walz

Vankleek Hill, December 2, 2010